

**Michigan Office of Administrative Hearings and Rules**

**Administrative Rules Division (ARD)**

MOAHR-Rules@michigan.gov

**REGULATORY IMPACT STATEMENT  
and COST-BENEFIT ANALYSIS (RIS)**

**Agency Information:**

**Department name:**

Agriculture and Rural Development

**Bureau name:**

Animal Industry Division

**Name of person filling out RIS:**

Jamie Guardiola

**Phone number of person filling out RIS:**

517-284-5730

**E-mail of person filling out RIS:**

GuardiolaJ1@michigan.gov

**Rule Set Information:**

**ARD assigned rule set number:**

2023-4 AC

**Title of proposed rule set:**

Bodies of Dead Animals

**Comparison of Rule(s) to Federal/State/Association Standard**

**1. Compare the proposed rules to parallel federal rules or standards set by a state or national licensing agency or accreditation association, if any exist.**

The United States Department of Agriculture (USDA) only requires two compost pile turns for poultry compost that is intended to prevent the spread of Highly Pathogenic Avian Influenza (HPAI). This federal standard is not followed in Michigan, which has more stringent requirements of three pile turns prevention of all major diseases. The proposed rule would allow the State of Michigan to align with the USDA standards for specific diseases with a minimum of two turns instead of the current Michigan practice requiring three in all cases. The result may be one less required turn of livestock compost piles as part of disease response and management for all livestock industries in Michigan.

**A. Are these rules required by state law or federal mandate?**

Per MCL 287.665, the Michigan Department of Agriculture and Rural Development (MDARD or Department) shall promulgate rules for composting of livestock. Additionally, Michigan is expected to comply with federal guidance provided by the USDA. The Mortality Composting Protocol for AI Infected Flocks USDA APHIS | Highly Pathogenic Avian Influenza (HPAI) available at: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/hpai/fadprep-hpai>. Poultry producers must comply with these provisions to be eligible for indemnity and reimbursement as part of the voluntary National Poultry Improvement Plan. The USDA only references a second composting phase, and not a third one like Michigan currently requires. Additionally, USDA has created guidance related to HPAI response that includes details on carcass management and composting. They expect that guidance to be followed so there is uniformity across the country.

**B. If these rules exceed a federal standard, please identify the federal standard or citation, describe why it is necessary that the proposed rules exceed the federal standard or law, and specify the costs and benefits arising out of the deviation.**

The proposed rule does not exceed the federal standard of two windrow compost pile turns; instead, the proposed rule lowers Michigan's three windrow compost pile turn requirement to align with the federal guidelines of two turns specific to composting for HPAI and other disease responses. By aligning with the federal standards, Michigan livestock operations will be able to save resources and repopulate facilities more quickly while managing the disease by USDA standards.

**2. Compare the proposed rules to standards in similarly situated states, based on geographic location, topography, natural resources, commonalities, or economic similarities.**

The proposed change will bring Michigan into alignment with federal standards and those of our comparable upper Midwest states. For example, as of January 2023, poultry flocks infected with HPAI have been found in forty-seven different states. USDA APHIS | 2022-2023 Confirmations of Highly Pathogenic Avian Influenza in Commercial and Backyard Flocks, available at: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/hpai-2022/2022-hpai-commercial-backyard-flocks>. Michigan, Minnesota, Wisconsin, Illinois, Indiana, and Ohio are geographically similarly situated. Several states, including Michigan, have detected HPAI so far in 2023. Minnesota only requires two heat cycles of mortality composting piles, like the USDA does. Composting livestock and poultry carcasses | UMN Extension, available at: <https://extension.umn.edu/preparing-livestock-emergencies/composting-livestock-and-poultry-carcasses#space-requirements-2224811>. The state of Wisconsin follows the same two heat cycle requirements for Minnesota, found in a mortality composting guide in collaboration with the Minnesota Department of Agriculture. DATCP Home Livestock Carcass Disposal, available at: [https://datcp.wi.gov/Pages/Programs\\_Services/CarcassDisposal.aspx#:~:text=Disposing%20of%20livestock%20carcasses%20is%20an%20important%20part,and%20within%2048%20hours%20from%20December%20through%20March](https://datcp.wi.gov/Pages/Programs_Services/CarcassDisposal.aspx#:~:text=Disposing%20of%20livestock%20carcasses%20is%20an%20important%20part,and%20within%2048%20hours%20from%20December%20through%20March), providing a link to Composting Animal Mortalities, available at: <https://datcp.wi.gov/Documents/minnesotacompostguide.pdf>. The Illinois Administrative Code also references a secondary (not a tertiary) heat cycle for composting of livestock carcasses. Section 90, available at: <https://www.ilga.gov/commission/jcar/admincode/008/008000900001100R.html>. The Indiana State Board of Animal Health relies on the Cornell Waste Management Institute to mandate two heat cycle turnovers of livestock mortality compost, just like Minnesota, Wisconsin, and Illinois. Cornell Waste Management Institute | Composting-Animal-Mortalities, available at: <https://www.in.gov/boah/files/Composting-Animal-Mortalities.pdf>. Ohio's Mortality Composting Manual also requires two heat cycle turnovers. Ohio's Livestock and Poultry Mortality Composting Manual, available at: [https://efotg.sc.egov.usda.gov/references/public/OH/Ohio\\_composting\\_manual.pdf](https://efotg.sc.egov.usda.gov/references/public/OH/Ohio_composting_manual.pdf). It is important to note that five similarly situated states to Michigan follow the USDA two heat cycle standard.

**A. If the rules exceed standards in those states, please explain why and specify the costs and benefits arising out of the deviation.**

The proposed rule does not exceed the standards in the comparable states. Instead, the proposed rule aligns Michigan's standards with surrounding and similarly situated states, based on USDA guidance that addresses the public health and safety components specific to this virus. In the case of other diseases, the intent is that this change would allow the State of Michigan to have the flexibility to follow the USDA guidance based on the specific disease being addressed, and not require three turns in all cases.

**3. Identify any laws, rules, and other legal requirements that may duplicate, overlap, or conflict with the proposed rules.**

The Department has not identified any laws, rules, or other legal requirements that duplicate, overlap, or conflict with the proposed rules. The primary legal requirements for composting of livestock mortality is the Bodies of Dead Animals (BODA) Act, 1982 PA 239 and the existing rules, with some additional environmental protection provisions in the Natural Resources and Environmental Protection Act, 1994 PA 451, Part 115, MCL 324.11501 to 324.11587, particularly MCL 324.11555 and MCL 324.11556. The United States Environmental Protection Agency and its National Environmental Policy Act require that federal agencies factor in environmental impacts to their rulemaking, but also makes it clear that "incident and site-specific decisions about carcass management are made at the state and local level, and since each state has its own statutes and authorities on animal disposal, it is important to consult with appropriate state environmental regulatory agencies about permits...". Carcass Management During Avian Influenza Outbreaks | US EPA, available at: <https://www.epa.gov/homeland-security-waste/carcass-management-during-avian-influenza-outbreaks#EnviroConcerns>.

**A. Explain how the rules have been coordinated, to the extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter. This section should include a discussion of the efforts undertaken by the agency to avoid or minimize duplication.**

The proposed rule change was discussed with USDA as a way to improve coordination and align with both federal and national standards. The Department is not aware of any federal, state, or local laws that conflict with or duplicate the subject matter of the proposed rule.

**4. If MCL 24.232(8) applies and the proposed rules are more stringent than the applicable federally mandated standard, provide a statement of specific facts that establish the clear and convincing need to adopt the more stringent rules.**

MCL 24.232(8) does not apply to the proposed rule as the federal standard for windrow turnover composting requires only two cycles for disease prevention; the proposed rule would align with federal USDA standards, and therefore would not be more stringent.

**5. If MCL 24.232(9) applies and the proposed rules are more stringent than the applicable federal standard, provide either the Michigan statute that specifically authorizes the more stringent rules OR a statement of the specific facts that establish the clear and convincing need to adopt the more stringent rules.**

MCL 24.232(9) does not apply to the proposed rule, as the proposed rule is not more stringent than the applicable federal standard.

## **Purpose and Objectives of the Rule(s)**

**6. Identify the behavior and frequency of behavior that the proposed rules are designed to alter.**

Composting has been a long-established method for managing carcasses, including as a part of disease response. The rules were put in place in 1995 and last updated in 2011 and were part of the response to the 2022 outbreak of HPAI in Michigan in a commercial poultry operation. The desired outcome of the proposed rule is to manage disease spread and unburden Michigan livestock producers by not requiring activities that are not needed to prevent disease response. The behavior the proposed rule is designed to alter is windrow turning of compost containing livestock carcasses in a mass mortality event. The frequency of behavior the proposed rule is designed to allow for a lower the amount of heat cycle compost turns in Michigan, which would align to the federal USDA recommended frequency of heat cycle compost pile turns in some situations.

**A. Estimate the change in the frequency of the targeted behavior expected from the proposed rules.**

The need for poultry mortality composting due to HPAI varies year to year, depending on the presence and virulence of the disease. The targeted behavior expected from the rule proposal is the number of heat cycle pile turns that Michigan livestock producers will have to conduct if their operation is impacted by a mass mortality event. The number of heat cycle compost pile turns under the proposed rule would be allowed to be adjusted to the type of livestock and disease situation, based on USDA guidance.

**B. Describe the difference between current behavior/practice and desired behavior/practice.**

The current practice for Michigan poultry and other livestock producers is to turn over compost carcass piles of livestock three times. The desired practice under the proposed rule is to allow the appropriate number of turns to be determined by the livestock and disease situation, based on USDA guidance.

**C. What is the desired outcome?**

The desired outcome under the proposed rule is to allow the Director to align decisions on composting in response to livestock disease outbreaks with available federal standards set by USDA to address disease management. This comes from the 2022 experience in Michigan and the need to effectively treat HPAI-infected livestock carcass piles on Michigan poultry farms in alignment with USDA recommended standards, as well as those in other Midwest states. This would only require two heat cycle turns of livestock carcass piles.

**7. Identify the harm resulting from the behavior that the proposed rules are designed to alter and the likelihood that the harm will occur in the absence of the rule.**

The requirement for three turns of the pile was to conservatively address disease management to prevent possible spread. It was not specific to disease or to type of livestock. Based on 2022 experience with HPAI in Michigan and close coordination with the USDA, MDARD recognized that USDA's standards requiring two pile turns would be protective based on the nature of the disease. The requirements in the rule are needed to address disease management, but allowing the Director to align requirements specific to disease and type of livestock based on USDA guidance will help maintain disease management, while not requiring unneeded resources. In the absence of the proposed rule, however, Michigan livestock producers would be required to turn compost piles three times, incurring extra burden and cost that may not be needed in all cases.

**A. What is the rationale for changing the rules instead of leaving them as currently written?**

Changing Michigan requirements for Michigan livestock producers requiring three heat cycle turnovers in all cases to having flexibility to reduce the number in some situations based on USDA guidance would save time and labor costs for livestock producers, and financial costs for MDARD. For HPAI, this change would allow Michigan to align with surrounding states and the USDA, all of which have been successful at containing HPAI in their poultry populations.

**8. Describe how the proposed rules protect the health, safety, and welfare of Michigan citizens while promoting a regulatory environment in Michigan that is the least burdensome alternative for those required to comply.**

The proposed rule to align the compost pile turn rate for composting livestock carcasses with USDA standards would be less burdensome for Michigan livestock producers and will comply with disease prevention recommendations of USDA.

**9. Describe any rules in the affected rule set that are obsolete or unnecessary and can be rescinded.**

This effort to propose the new rule of flexibility to determine the appropriate number of heat cycle compost pile turns is focused on a particular experience from a Michigan poultry producer in 2022 and is for a bigger review and potential overhaul of other standards. It is not the position of MDARD that any other rules at this time should be amended or redacted in Michigan's BODA Act, specifically.

**Fiscal Impact on the Agency**

Fiscal impact is an increase or decrease in expenditures from the current level of expenditures, i.e. hiring additional staff, higher contract costs, programming costs, changes in reimbursements rates, etc. over and above what is currently expended for that function. It does not include more intangible costs for benefits, such as opportunity costs, the value of time saved or lost, etc., unless those issues result in a measurable impact on expenditures.

**10. Please provide the fiscal impact on the agency (an estimate of the cost of rule imposition or potential savings for the agency promulgating the rule).**

Though the primary cost savings for this rule benefits livestock producers, there will not be an expectation that MDARD assist with supporting state-imposed costs not required or covered by USDA. Rather than putting forth expenditures to cover additional heat cycle turns for compost piles that is only required at the state and not the federal level, MDARD will no longer have to bear the cost of Michigan livestock producer's third pile turn, when not needed. In the fiscal year of 2022, MDARD reimbursed \$7,842.00 to the poultry operation that needed to have a third compost turn due to HPAI. This could escalate to include greater costs in the future depending on HPAI or other disease outbreaks.

**11. Describe whether or not an agency appropriation has been made or a funding source provided for any expenditures associated with the proposed rules.**

No agency appropriation has been made specifically for composting costs; funding is from MDARD Animal Industry Division general funds. Additional funding sources are not provided for any expenditures associated with the proposed rule changes, because the proposed rule amending the amount of compost pile turns decreases possible department expenditures instead of increasing them.

**12. Describe how the proposed rules are necessary and suitable to accomplish their purpose, in relationship to the burden(s) the rules place on individuals. Burdens may include fiscal or administrative burdens, or duplicative acts.**

This proposed rule eases an existing burden on the State and livestock producers. The proposed rule to allow the flexibility to determine the appropriate number of compost turns based on USDA guidance allows for satisfactory emergency response under MDARD to contain disease, while also relieving fiscal burdens on the department and administrative, economic, and labor-related burdens on Michigan livestock producers.

**A. Despite the identified burden(s), identify how the requirements in the rules are still needed and reasonable compared to the burdens.**

The proposed rule will not impose any kind of new burden on individuals in Michigan. The requirement in the proposed rule for the flexibility to determine the appropriate number of heat cycle turns of livestock carcass compost piles, rather than requiring three turns in all situations as the current rules states. Aligning Michigan's standards with the standards of the USDA is less burdensome on Michigan livestock producers and is a reasonable measure because it would adequately contain the spread of the disease and in the example of HPAI, aligns with federal and multiple other states' standards for doing so.

## **Impact on Other State or Local Governmental Units**

**13. Estimate any increase or decrease in revenues to other state or local governmental units (i.e. cities, counties, school districts) as a result of the rule. Estimate the cost increases or reductions for other state or local governmental units (i.e. cities, counties, school districts) as a result of the rule. Include the cost of equipment, supplies, labor, and increased administrative costs in both the initial imposition of the rule and any ongoing monitoring.**

There will be no decrease or increase in revenue to other state or local governmental units as a result of the proposed rule. No city, county, or school district is covering the cost of the third pile turnover requirement as currently mandated by the rule. The compensation for the costs for the third compost pile turn of due to HPAI in 2022 came directly from MDARD.

**14. Discuss any program, service, duty, or responsibility imposed upon any city, county, town, village, or school district by the rules.**

There is no duty or responsibility imposed on any of the listed groups or organizations.

**A. Describe any actions that governmental units must take to be in compliance with the rules. This section should include items such as record keeping and reporting requirements or changing operational practices.**

There are no compliance requirements such as record keeping or reporting for other governmental units.

**15. Describe whether or not an appropriation to state or local governmental units has been made or a funding source provided for any additional expenditures associated with the proposed rules.**

No additional expenditures are required to other state or to local governmental units, so no appropriation is necessary. MDARD is responsible for ensuring livestock producers in Michigan comply with state turn standards for their composting piles, and existing appropriations to MDARD's Animal Industry Division have been sufficient.

## **Rural Impact**

**16. In general, what impact will the rules have on rural areas?**

Michigan livestock production generally occurs in rural areas, so rules on composting of livestock mortality are more applicable to rural areas. The impact of this rule change will benefit those rural areas by allowing producers to get back into operation without being held up for additional days and weeks due to a third composting cycle turn.

**A. Describe the types of public or private interests in rural areas that will be affected by the rules.**

Private interests which form Michigan livestock industries in rural Michigan will be affected positively by the proposed rule. These interests include rural Michigan livestock producers' labor, time, and disease management concerns as a result of state guidelines in controlling the spread of disease.

## **Environmental Impact**

**17. Do the proposed rules have any impact on the environment? If yes, please explain.**

The proposed rule does not have any impact on the environment as no rules or regulations under federal or state environmental laws are being altered or impacted. Standards for the application of finished compost are unchanged. The ability to reduce the number of compost pile turns reduces the amount of time and inputs necessary for compost pile management, while maintaining effective disease control.

## **Small Business Impact Statement**

**18. Describe whether and how the agency considered exempting small businesses from the proposed rules.**

MDARD is not exempting small businesses from the proposed rule. The proposed rule is beneficial for all livestock producers of all sizes in Michigan and reduces the amount of composting materials and labor any producer must do when participating in these disease control measures. The size of the composting pile is directly related to the size of the livestock operation, so cost is related to the size of the operation. Exempting small businesses from preventing disease spread would be problematic as it could lead to more small businesses having disease outbreaks. In the example of HPAI, further participation in the USDA's National Poultry Improvement Plan program requires two compost turns, regardless of designation as a small business. Poultry operations of all sizes are at risk due to losing their flocks. This would be similar in other livestock industries as well.

**19. If small businesses are not exempt, describe (a) the manner in which the agency reduced the economic impact of the proposed rules on small businesses, including a detailed recitation of the efforts of the agency to comply with the mandate to reduce the disproportionate impact of the rules upon small businesses as described below (in accordance with MCL 24.240(1)(a-d)), or (b) the reasons such a reduction was not lawful or feasible.**

There is no disproportionate or disparate economic impact on small businesses from the proposed rule; the proposed rule equally benefits small, medium, and large Michigan livestock producers who have livestock carcasses they need to compost in a mass carcass disposal event.

**A. Identify and estimate the number of small businesses affected by the proposed rules and the probable effect on small businesses.**

This proposed change reduces the impact on livestock operations of all sizes. In the example of HPAI, from a 2019 Department publication, the Michigan poultry industry produces 8.87 million chicken broilers and 5.3 million turkeys per year. There are approximately 20 chicken farms throughout Michigan. There are 17 turkey farmers with 53 turkey farms in the state, The turkey industry has a total economic impact of \$2.9 billion. Michigan ranks seventh in production of eggs, with more than 15.4 million laying hens that produce 4,548 million eggs per year. There are eight farmers with 17 farms spread throughout Michigan. Egg production contributes approximately \$655 million to the Michigan economy annually.

**B. Describe how the agency established differing compliance or reporting requirements or timetables for small businesses under the rules after projecting the required reporting, record-keeping, and other administrative costs.**

Compliance is based on preventing disease spread, not on size of operation. Composting scope and costs are directly proportional to the size of the operation. It is not necessary to establish differing compliance or reporting requirements or timetables for small businesses under the proposed rule. Required reporting, record-keeping, and other administrative costs decrease under the proposed rule, because there may be one less heat cycle turn to perform, track, and report on if Michigan standards for disease-spread prevention are aligned with the federal USDA standards.

**C. Describe how the agency consolidated or simplified the compliance and reporting requirements for small businesses and identify the skills necessary to comply with the reporting requirements.**

Composting scope and costs are directly proportional to the size of the operation; MDARD is not differentiating consolidation or simplification of the reporting requirements or heat cycle compost pile turn compliance based on businesses size because the requirements and compliance guidelines remain the same for large and small businesses in the Michigan livestock sector, based on disease management. The skills necessary to comply with the reporting requirements for heat cycle turns of compost piles remains the same process but with potentially one less turn, which is applicable to and benefits operations of all sizes.

**D. Describe how the agency established performance standards to replace design or operation standards required by the proposed rules.**

The performance standards for composting are based on the ability of the process to eliminate disease organisms. The USDA has determined that two turns of a compost pile is sufficient to prevent spread of HPAI. MDARD agrees with this performance and operational standard and is reducing requirements on poultry producers accordingly. This may be applicable in other future disease incidents in other livestock industries as well.

**20. Identify any disproportionate impact the proposed rules may have on small businesses because of their size or geographic location.**

There is no disproportionate impact based on size of operation or geographic location. The proposed rule for the flexibility to implement two heat cycle compost pile turns instead of three does not negatively impact a small business more than it impacts a large commercial livestock operation in Michigan. The proposed rule benefits all livestock producers and in fact may benefit small producers more if they struggle to provide the labor necessary for the current Michigan requirement of three pile turns. The geographic location of Michigan livestock operations should not be impacted by the proposed rule.

**21. Identify the nature of any report and the estimated cost of its preparation by small businesses required to comply with the proposed rules.**

There should not be any extra costs that businesses of any size must comply with as a result of the proposed rule; this change reduces compliance costs.

**22. Analyze the costs of compliance for all small businesses affected by the proposed rules, including costs of equipment, supplies, labor, and increased administrative costs.**

The proposed rule decreases the amount of labor, equipment, and other costs that small businesses and any livestock operations in Michigan require for turning compost piles. No equipment, supply, or administrative costs should increase.

**23. Identify the nature and estimated cost of any legal, consulting, or accounting services that small businesses would incur in complying with the proposed rules.**

The proposed rule aligns the number of compost pile turns for livestock producers with federal USDA standards and thus, should not require any business, small or otherwise, to incur additional legal or other costs to manage their livestock mortality composting.

**24. Estimate the ability of small businesses to absorb the costs without suffering economic harm and without adversely affecting competition in the marketplace.**

There are no additional costs for small businesses to absorb with the proposed rule. The proposed rule makes it easier for all livestock producers in Michigan to comply with national standards for disease control.

**25. Estimate the cost, if any, to the agency of administering or enforcing a rule that exempts or sets lesser standards for compliance by small businesses.**

There will be no exemption for small business regarding the proposed rule, because the proposed rule is beneficial to all livestock producers in Michigan. Furthermore, administrative costs for the Department are decreased because the Department will no longer have to potentially bear the financial cost of an unnecessary and additional compost pile turnover.

**26. Identify the impact on the public interest of exempting or setting lesser standards of compliance for small businesses.**

Standards for composting as part of disease management are based on eliminating disease risk. No lesser standards or exemptions are set for small businesses. The proposed rule benefits all Michigan livestock producers by allowing the flexibility to align with the appropriate number of compost pile turns as recommended by the USDA, instead of the current requirement of three in all situations. Setting lower standards for small businesses by requiring for example, one livestock mortality compost turn instead of two, could be detrimental to public health and not adequately manage the spread of disease. Therefore, the public interest would be in maintaining the federally recommended standard for the specific disease situation.

**27. Describe whether and how the agency has involved small businesses in the development of the proposed rules.**

A Michigan poultry farm impacted by HPAI 2022 strongly suggested MDARD amend the BODA rules to reflect the USDA federally suggested two pile turn standard; MDARD is not identifying the business because of the privacy provisions of the Animal Industry Act (MCL 287.709, Section 9(3)), but small businesses and large livestock operations alike have requested that Michigan align with federal standards for less burdensome compost pile turn requirements.

**A. If small businesses were involved in the development of the rules, please identify the business(es).**

The Department engaged the commercial poultry operation impacted by HPAI in 2022 (not identified due to the privacy provisions of the animal industry act, 1988 PA 466, MCL 287.701 to 287.747, specifically MCL 287.709), and has been in regular discussion with the Michigan Allied Poultry Industry involved as far as the impetus of requesting that Michigan HPAI control standards aligned with federal USDA standards.

## **Cost-Benefit Analysis of Rules (independent of statutory impact)**

### **28. Estimate the actual statewide compliance costs of the rule amendments on businesses or groups.**

Compliance costs will decrease as a result of the proposed rule for all businesses. In the example of HPAI, the cost to one producer for a third compost pile turn in 2022 was \$7,842.00, which was covered by the Department, but the total compliance costs for two turns rather than three turnovers depends on the prevalence of HPAI in the 2023 year in Michigan.

#### **A. Identify the businesses or groups who will be directly affected by, bear the cost of, or directly benefit from the proposed rules.**

The groups who will directly benefit from the proposed rule for federally aligned heat cycle compost pile turn standards are MDARD, the State of Michigan, and the livestock industries in Michigan.

#### **B. What additional costs will be imposed on businesses and other groups as a result of these proposed rules (i.e. new equipment, supplies, labor, accounting, or recordkeeping)? Please identify the types and number of businesses and groups. Be sure to quantify how each entity will be affected.**

There will be no additional costs imposed on MDARD or Michigan livestock producers as a result of the proposed rule- no labor, equipment, supplies, recordkeeping, or other measure of costs will increase; costs will decrease due to the revised requirements.

### **29. Estimate the actual statewide compliance costs of the proposed rules on individuals (regulated individuals or the public). Include the costs of education, training, application fees, examination fees, license fees, new equipment, supplies, labor, accounting, or recordkeeping.**

No new equipment or compliance fees will be imposed on private individuals running livestock operations or have any additional cost to the public. Aligning Michigan compost turn standards for disease-impacted livestock with the USDA's suggested pile turn standards lessens the need for labor, education, supplies, and other costs.

#### **A. How many and what category of individuals will be affected by the rules?**

This may impact all Michigan livestock producers. In the example of the poultry industry, approximately ninety farms and MDARD will be affected by the proposed rule- this constitutes the agricultural sector of Michigan only as it relates to poultry production.

#### **B. What qualitative and quantitative impact do the proposed changes in rules have on these individuals?**

The qualitative impact the proposed rule has on MDARD and Michigan livestock producers is less cost and administrative requirements to the state livestock industry and less labor efforts on the part of Michigan livestock producers. In the example of HPAI, the cost to the commercial poultry facility impacted by HPAI in 2022 was \$7,842.00 for a third heat cycle compost pile turn.

### **30. Quantify any cost reductions to businesses, individuals, groups of individuals, or governmental units as a result of the proposed rules.**

In the example of HPAI, the cost of the third turn of the compost pile for the impacted commercial poultry operation in 2022 and compensated by the Department, was \$7,842.00. Total costs to the industry and potentially the Department per year by aligning with the USDA standard pile turns should reduce potential costs going forward. Labor and input costs and time will be saved for poultry operations in Michigan due to reduced interruption to their normal poultry operation activities and more affordable and effective disease control measures. This is one example, and these changes would have a significant impact in the mass carcass disposal event in any Michigan livestock industry.

### **31. Estimate the primary and direct benefits and any secondary or indirect benefits of the proposed rules. Please provide both quantitative and qualitative information, as well as your assumptions.**

The primary and direct benefits of the proposed rule are less labor time for livestock producers so that they can effectively manage the spread of disease under standards approved by the federal government, while also continuing their normal operations more quickly. The current requirement of three compost pile turns when composting requires more time and delay before poultry facilities can resume normal operations. In the example of HPAI, the federal standards of two pile turns requires less time for individuals running poultry operations to clean, restock, and resume production.

### **32. Explain how the proposed rules will impact business growth and job creation (or elimination) in Michigan.**

The proposed rule will ease the burden on livestock operations during disease outbreaks and allow them to return to normal operations more quickly. The laborers who already conduct the pile turns of composted carcasses for disease spread prevention will be able to do their jobs more efficiently so that the livestock operations may return to normal operations.

**33. Identify any individuals or businesses who will be disproportionately affected by the rules as a result of their industrial sector, segment of the public, business size, or geographic location.**

No individuals or businesses will be disproportionately affected by the proposed rule; the rule benefits any livestock operation in Michigan that deals with composting and pile turns due to a mass carcass disposal situation.

**34. Identify the sources the agency relied upon in compiling the regulatory impact statement, including the methodology utilized in determining the existence and extent of the impact of the proposed rules and a cost-benefit analysis of the proposed rules.**

In the example of HPAI, MDARD relied on financial records from the Department in 2022 regarding additional compost pile turn expenditures for Michigan poultry farmers, as well as the standards set forth by the USDA.

Additional discussions with USDA, the Michigan Allied Poultry Industry, and counterparts in other state departments of agriculture have helped in the determination that this regulatory burden can be reduced to align with national standards and still be protective.

**A. How were estimates made, and what were your assumptions? Include internal and external sources, published reports, information provided by associations or organizations, etc., that demonstrate a need for the proposed rules.**

Michigan experienced multiple detections of HPAI in 2022, including at one commercial poultry operation. The costs for the third turn of the compost piles there were documented. Consultation with USDA, Michigan State University subject matter experts, and the Michigan Allied Poultry Industry representing poultry producers, has helped to determine that having the ability to determine the appropriate number of compost turns based on the event is appropriate.

## **Alternative to Regulation**

**35. Identify any reasonable alternatives to the proposed rules that would achieve the same or similar goals.**

This proposed change helps to achieve the same goal of pathogen reduction and prevention with less burden on livestock operations and the Department. The proposed rule is aligning Michigan standards with the USDA's standards in disease prevention and control, and the best method to do this is through composting and managing heat cycle compost pile turns of disease-impacted livestock carcasses. Because the federal government only requires two turnovers instead of three for HPAI, it follows that keeping a more stringent rate of turns as a requirement in Michigan would not accomplish the same goals without a much higher financial cost and labor expenditure from Michigan poultry producers.

**A. Please include any statutory amendments that may be necessary to achieve such alternatives.**

No statutory amendments are needed; this proposed rule change will address this situation and align the Michigan standard for heat cycle compost pile turns to the federal USDA standard.

**36. Discuss the feasibility of establishing a regulatory program similar to that proposed in the rules that would operate through private market-based mechanisms. Please include a discussion of private market-based systems utilized by other states.**

Livestock disease management is a federal and state responsibility, in cooperation with the livestock industry. It is imperative to carefully monitor diseases and ensure they do not spread. In the example of HPAI, the National Poultry Improvement Plan has been established to help prevent and coordinate response to disease outbreaks. This proposed change will align Michigan standards for compost pile turns with national standards.

**37. Discuss all significant alternatives the agency considered during rule development and why they were not incorporated into the rules. This section should include ideas considered both during internal discussions and discussions with stakeholders, affected parties, or advisory groups.**

The Department's proposed rule is based on experience in 2022 from the detection and response to HPAI in a commercial Michigan poultry operation. The proposal is to reduce the burden on livestock producers and the State. The standards and methods for managing disease in livestock composting operations are based on scientific research. In the example of HPAI, research has demonstrated that HPAI can be effectively managed with two compost pile turns. Other alternatives have not been presented. The impacted Michigan poultry industry itself suggested the Department take this route; MDARD has met with multiple livestock and industry organizations about going in this direction and aligning with federal USDA disease prevention standards.

### **Additional Information**

**38. As required by MCL 24.245b(1)(c), please describe any instructions regarding the method of complying with the rules, if applicable.**

Instructions on managing of compost piles are already part of the BODA rules themselves; this change will address the number of required turns for compost piles. Additional guidance is available from the USDA and from Michigan State University Extension.